

**Claims**

**Listing of Claims**

1. (Currently Amended) An isolated aggregated composition comprising:
  - (a) [[a]] an isolated polypeptide having transport function of VP22[[,]]; and
  - (b) an oligonucleotide, polynucleotide or heterologous polypeptide, wherein the oligonucleotide, polynucleotide or heterologous polypeptide is bound to the isolated polypeptide having transport function of VP22 by a disulfide bond or a cleavage-susceptible bond, and wherein the isolated aggregated composition is as a stable aggregate of a size of 0.1 to 5 microns.
2. (Currently Amended) An The isolated aggregated composition according to claim 1, which further comprises further comprising a pharmaceutically acceptable excipient.
3. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the polypeptide having transport function of VP22 comprises amino acid residues 159-301 of the amino acid sequence set forth as SEQ ID NO: 12.
4. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the oligonucleotide or polynucleotide comprises a circular plasmid.
5. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the oligonucleotide or polynucleotide comprises modified phosphorothioate[[s]] linkages.
6. (Currently Amended) An The isolated aggregated composition according to claim 5, wherein the modified phosphodiester linkages comprise phosphorothioate linkages.
7. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the oligonucleotide or polynucleotide is labeled with a detectable label.
8. (Currently Amended) An The isolated aggregated composition according to claim 1,

wherein the oligonucleotide or polynucleotide is selected from the group consisting of: an antisense molecule, a ribozyme molecule, a chimeroplast, and a polynucleotide capable of binding a transcription factor.

9. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the oligonucleotide or polynucleotide encodes a protein or peptide.

10. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the heterologous polypeptide is a fusion protein comprising a non-VP22 peptide or protein.

11. (Currently Amended) An The isolated aggregated composition according to claim 10, wherein the non-VP22 heterologous polypeptide sequence is linked covalently bound to the polypeptide having the transport function of VP22 by a cleavage-susceptible amino acid sequence.

12. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the heterologous polypeptide is conjugated to a glycoside.

13. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the oligonucleotide or polynucleotide is coupled to a non-nucleotide molecule.

14. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the aggregate comprises (a) the polypeptide having transport function of VP22 and (b) the oligonucleotide[[,]] or polynucleotide non-covalently bound to the polypeptide having transport function of VP22 or heterologous polypeptide are present in the isolated aggregated composition at a ratio of 1:1 polypeptide and nucleotide in a ratio of at least 1 to 1.

15. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein the oligonucleotide or polynucleotide comprises about is at least 10 bases in length.

16. (Currently Amended) An The isolated aggregated composition according to claim 1,

wherein said aggregate disaggregates upon exposure to light which comprises particles of said aggregated composition having a particle size in the range of about 0.1 to about 5 microns.

17. (Currently Amended) An The isolated aggregated composition according to claim 1, wherein said polypeptide and said nucleotide are encapsulated in a liposome.

18. (Currently Amended) A method of making an the isolated aggregated composition according to claim 1, comprising[[,]]:

(a) mixing [[a]] the isolated polypeptide with the transport function of VP22, with the isolated oligonucleotide or polynucleotide[, and,] at a ratio of 1:1 to 1:2 to form a mixture in vitro;

(b) allowing incubating the mixture obtained in step (a) to form isolated aggregates, thereby making the isolated aggregated composition.

19. (Currently Amended) A method according to claim 18, further comprising monitoring the formation of aggregates using microscopy or electrophoresis wherein the polypeptide is mixed with nucleotide in a ratio of at least 1 to 1 of polypeptide to nucleotide.

20. (Currently Amended) A method of delivering molecules to a cell *in vitro* comprising (a) contacting said cell with [[an]] the isolated aggregated composition according to claim 1.

21. (Canceled).

22. (Currently Amended) The method of claim 18, wherein the isolated aggregates have a particle size of -about 0.1 to about 5 microns.

23. (Previously Presented) A method of delivering molecules to a cell *in vitro*, comprising

(a) contacting said cell with an aggregated composition comprising (1) a polypeptide having transport function of VP22, and (2) an oligonucleotide or polypeptide; and

(b) exposing the cell to light to promote disaggregation of the aggregated composition; thereby delivering the oligonucleotide or polypeptide to the cell *in vitro*.

24. (New) The purified aggregated composition of claim 16, further comprising a photosensitizing molecule.

25. (New) The purified aggregated composition of claim 1, further comprising a radio-label or a flurochrome label.